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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 11/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/581,329

Examiner

Geoffrey L. Knable

Applicant(s)

MORAND ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The papers filed on 8-19-2002 (certificate of mailing dated 8-12-2002) have not been made part of the permanent records of the United States Patent and Trademark Office (Office) for this application (37 CFR 1.52(a)) because of damage from the United States Postal Service irradiation process. The above-identified papers, however, were not so damaged as to preclude the USPTO from making a legible copy of such papers. Therefore, the Office has made a copy of these papers, substituted them for the originals in the file, and stamped that copy:

COPY OF PAPERS
ORIGINALLY FILED

If applicant wants to review the accuracy of the Office's copy of such papers, applicant may either inspect the application (37 CFR 1.14(d)) or may request a copy of the Office's records of such papers (*i.e.*, a copy of the copy made by the Office) from the Office of Public Records for the fee specified in 37 CFR 1.19(b)(4). Please do **not** call the Technology Center's Customer Service Center to inquiry about the completeness or accuracy of Office's copy of the above-identified papers, as the Technology Center's Customer Service Center will **not** be able to provide this service.

If applicant does not consider the Office's copy of such papers to be accurate, applicant must provide a copy of the above-identified papers (except for any U.S. or foreign patent documents submitted with the above-identified papers) with a statement that such copy is a complete and accurate copy of the originally submitted documents. If applicant provides such a copy of the above-identified papers and statement within **THREE MONTHS** of the mail date of this Office action, the Office will add the original mailroom date and use the copy provided by applicant as the permanent Office record of the above-identified papers in place of the copy made by the Office. Otherwise, the Office's copy will be used as the permanent Office record of the above-identified papers (*i.e.*, the Office will use the copy of the above-identified papers made by the Office for examination and all other purposes). This three-month period is not extendable.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable

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one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

This rejection is maintained for the reasons set forth in the last office action.

Additionally, a new grounds of rejection under 35 USC 112, first paragraph is also raised by applicant's response. In particular, responsive to the 112, second paragraph rejection concerning what was meant by fastening the free ends of the preform, applicant has acknowledged that one way to build a tire involves

"winding an innerliner and carcass ply on a cylindrical tire building drum followed by toroidal shaping. This however is not the only manner in which tires are manufactured. The technique of "linking" "free ends of the deformable preform" also is a known method of manufacturing a tire. Thus, one skilled in the art would know what is meant by this language."

In light of this response, it now is not only not clear what is meant by "fastening the free ends", it also is not clear how the claimed tire is even to be built insofar as apparently it is not built as the vast majority of tires are built. In other words, from applicant's response, it seems that the technique of "linking free ends" is intended to be read as a *separate and distinct* method for building a tire (i.e. distinct from winding an innerliner and carcass ply on a cylindrical tire building drum followed by toroidal shaping), this being alleged to be "known". No evidence in support of this position is presented and it is submitted that insufficient information has been provided for the artisan to practice the invention consistent with the apparent intended meaning of the terms "linking the free ends". This also now raises some question as to what is intended by the claimed "stretching" since it apparently is not the normal toroidal

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shaping (as the claim/spec. were originally read), again the disclosure being insufficient to practice the invention consistent with the apparent meaning being urged.

4. Claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The new claims 16-30 reference the steps a "a.", "b.", etc. – to avoid the potential for any confusion by the printer or otherwise caused by the use of a period within the body of a claim, it is suggested that the period be replaced by something other than a period (e.g. a parentheses; a colon; etc.).

New claim 16 defines a "method of modifying a process for manufacturing a tire", this being followed by defining the process as "using an assembly" and "involving stretching" and then defining steps of the method. It however is not clear from this language exactly what the scope of protection afforded by this claim is, it being noted in particular that the first 8 lines of the claim do not seem to positively define any particular steps ("using" and "involving" not being read as steps of a process). Since the scope of the process being modified is not clear, the scope of the entire claim is not readily ascertainable.

In step "a." of claim 16, the phrase "homologous said first rectangular general shape" is grammatically awkward and confusing.

In claim 16, it is not entirely clear what is meant by "linking of the free ends of the preform" and how this fits into known tire building, applicant's response to this rejection creating further confusion – note the preceding rejection paragraph. While it could

conceivably be argued that this is simply splicing the ends of the wound sheet, from applicant's response, it seems clear that something else (and in fact some other building method not involving winding a liner and carcass on a cylindrical drum) is intended. Clarification is required.

In claim 16, it is still not considered that the scope of protection afforded by defining that the conductor is fixed "in a loose manner" can be adequately and readily ascertained.

Claims 16 and 25 each define that the conductor path extends "across" or "over" or "along" a length and width of the preform or the tire. In light of applicant's arguments, the scope of this language is considered to be indefinite. In particular, from applicant's arguments, it seems that it is being urged that this language defines over references showing the conductor in the lateral sides of a tire but rather requires that the conductor be in the "periphery" or tread area of the tire. This language however was read by the examiner as defining in essence the *direction* of extent of the conductor, not the actual magnitude of that extent. Applicant however would seem to be urging that the conductor extends in essence substantially over the entire length and width of the adjacent carcass or liner ply (the "preform"). However, if this were the case (and assuming normal and typical liners and carcass plies), then the conductors would have to extend entirely from one bead of the tire to the other bead of the tire. In other words, as is well known in this art, the innerliner and carcass plies must extend from bead to bead and are not restricted to the tread areas of the tire. Reading the language consistent with applicant's arguments, then, it would seem that the claims require that

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the conductor extend from bead to bead across the entire tire (i.e. the tread and sidewall areas of the tire). It does not however appear that this is intended. The scope of protection afforded by this language is thus indefinite and confusing.

It is also still not clear what a technique of "overcasting" or "tacking" kind (claim 21) represents, this rendering the scope of the claim indefinite.

New claim 27 defines that the loop interacts with another loop external to the tire. This is indefinite as it is not clear whether the claim now is intended to encompass only a tire or a tire in combination with some external loop. As it seems that the intent is to define this as a *capability* of the tire (as in the original claims), not an actual positive part of the claimed structure, it is suggested the language be amended to reflect this.

5. Claims 16-24 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Step "c." of claim 16 defines that the free ends of the complementary preform are linked together "substantially when the free ends of the deformable preform are linked together." In addition to the confusion with respect to what is meant by "linking the free ends," it is not clear where support exists in the original disclosure for tying the two "linking" steps in time as now defined in step "c.". As no support is readily apparent, it is considered that this was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

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application was filed, had possession of the claimed invention, i.e. this is considered to be new matter.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack et al. (US 5,181,975) as applied in the last office action against the corresponding claims.

7. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by DE 2524463 to Breuer as applied in the last office action against the corresponding claims.

8. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuermann (US 5,479,171) as applied in the last office action against the corresponding claims.

9. Claims 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuermann (US 5,479,171) taken in view of WO 90/12474 to Malmer et al. as applied in the last office action against the corresponding claims.

10. Applicant's arguments filed 8-19-2002 have been fully considered but they are not persuasive.

With respect to the 112, first paragraph rejection, applicant has argued that “[o]vercasting and tacking are well known knitting and stitching techniques” and thus that the ordinary artisan would know what is meant by these terms in the specification. This argument has been considered but is unpersuasive for several reasons. First, no evidence has been provided to show that these techniques are known. Second, even if known in “knitting” and “stitching” arts, there has been no conclusive showing as to why the ordinary artisan would understand these terms, taken in the present context, to be in

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reference to techniques in knitting or stitching. Note in particular that casting and tacking have various meanings in various arts and there has been no indication in the original disclosure to suggest that the meaning urged by applicant is the intended meaning. Note for example that in the laminating arts, "casting" would normally mean applying a material down on or over a surface to form a layer while "tacking" in the rubber art in general would be read as defining that tack bond that occurs as a result of the building tack necessary and present in green rubber compounds. It is thus submitted that, although it is argued that a knitting or stitching technique was apparently the intended meaning of these terms, the original disclosure is not considered sufficient to suggest this to the ordinary artisan and thus the disclosure is considered to remain insufficient to enable practice of the invention, i.e. the requisite loose fixing of the conductors, without an undue burden of experimentation. Thirdly and finally, regardless of the intended details of these techniques, there has been insufficient guidance provided to the artisan to enable practice of the invention consistent with these requirements. In other words, regardless of what these teachings were intended to comprise, the lack of details of their application in this particular environment is considered to thereby provide insufficient guidance to the ordinary artisan to effect the necessary loose fixing without an undue burden of experimentation.

In this regard, it was also pointed out by applicant that details of zigzagging the conductor to withstand the stretching are also provided. While these details are provided, these are with respect to the overall shape of the conductor relative to the support *rather than how the conductor is fixed to the support* – these would seem to be

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separate (albeit related) requirements. The given details thus still do not provide any guidance to the ordinary artisan desiring to appropriately loosely affix the conductor to the support.

As to the 35 USC 112, second paragraph rejections, any rejections not maintained have been withdrawn. Some remaining as well as new rejections on this grounds remain – note the statement of rejection above. The arguments with respect to the loose affixing of the conductor are unpersuasive for the same reasons set forth above.

As to the art rejections, with respect to DE '463, it is argued that the loops in this reference “are lateral in the tire and do not extend across its width and periphery”. This argument has been considered but is unpersuasive and not entirely understood. The conductors in the reference clearly extend around the periphery of the tire in the tread area (note the figures) and further in light of fig. 2a in particular, the loops are in the form of open rectangles that include portions (the short portions of the rectangle) that extend in the width direction of the tire. While from fig. 3 it is apparent that the conductor may have an additional extent in the radial direction of the tire, nothing in the present claims is considered to define over this.

As to the rejections over Pollack et al. and Schuermann, it is argued that the claim requires an extent for the loop that defines over what is shown in these references. As already noted in the 35 USC 112 rejection above, there is considered to be an ambiguity in determining exactly what extent for the loops is required by the claim language. Again, the claim language was read to require a *direction* of extent of the

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loops, not necessarily a magnitude of this extent. Applicant however would seem to indicate that the present claim language is considered to require that the loop be located at the "periphery" of the tire, this apparently meaning the tread area of the tire. For reasons noted further in the 112 rejection above, however, it is not clear that this language can reasonably be read in this manner. These rejections thus are still deemed proper and will be maintained. Note again that if the claim language is to be read to require that the loops extend over substantially the entire length and width of the "first rectangular shape" (i.e. of the liner and/or carcass plies), then this should require that the loops extend from bead to bead of the tire, this apparently however not being applicant's intent.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

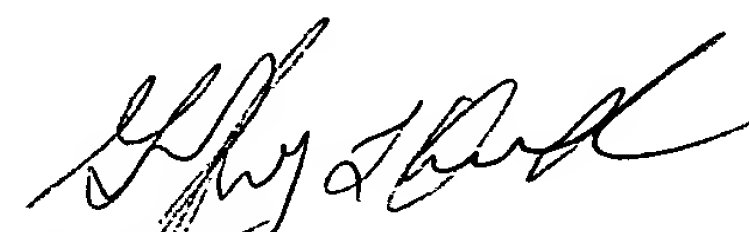
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
November 3, 2002